

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A piston ring for use with a piston in a reciprocable compressor, the piston ring comprised of a self-lubricating plastics material for sealing elements, comprising a composed of a wear-resistant polymer matrix in which are dispersed microcapsules containing a lubricating agent, wherein the polymer matrix is selected from one or more of a group consisting of polyketones, polybutadiene-sytrene and polytetrafluoroethylene.

2. (Canceled)

3. (Currently Amended) ~~A material~~ The piston ring according to claim 2, characterised ~~in that~~ in that 1, wherein said polyketone is an aromatic polyketone.

4. (Currently Amended) ~~A material~~ The piston ring according to claim 3, characterised ~~in that~~ wherein said aromatic polyketone is polyetherether ketone (PEEK).

5. (Canceled)

6. (Currently Amended) ~~A material~~ The piston ring according to claim 1, characterised ~~in that~~ wherein said microcapsules comprise a shell of polyoxymethylene urea (PMU).

7. (Currently Amended) ~~A material~~ The piston ring according to claim 1, characterised ~~in that~~ wherein said microcapsules have an average diameter of between 5 and 500 μ .

8. (Currently Amended) ~~A material~~ The piston ring according to claim 1, characterised ~~in that~~ wherein said microcapsules are dispersed in said polymer matrix in a ratio by weight of between 2 and 30 wt. %.

9. (Currently Amended) ~~A material~~ The piston ring according to claim 1, characterised ~~in that~~ wherein said lubricant incorporated in the microcapsules is an oil which is low in acidity.

10. (Currently Amended) ~~A material~~ The piston ring according to claim 1, characterised ~~in that~~ wherein said lubricant is a fluid lubricant which has a viscosity within the range between 20 and 250 cSt at 40°C.

11. (Currently Amended) ~~A material~~ The piston ring according to claim 1, characterised ~~in that~~ wherein said lubricant further comprises an additive or filler to increase mechanical strength or thermal conductivity.

12. (Currently Amended) ~~A material~~ The piston ring according to claim 11, characterised ~~in that~~ wherein said additive is a microelement selected from the group consisting of zinc, boron and mixtures thereof.

13-17. (Canceled)

18. (Currently Amended) A method for reducing the friction or wear of adjacent sliding elements in motion, in which one of the adjacent surfaces of said sliding elements comprises a piston ring formed with self-lubricating material according to claim 1, the method comprising forming the piston ring from a wear-resistant polymer matrix in which are dispersed microcapsules containing a lubricating agent, wherein the polymer matrix is selected from a group consisting of one or more of polyketones, polybutadiene-styrene and polytetrafluoroethylene.

19. (Canceled)